

REMARKS

This Amendment is fully responsive to the final Office Action dated July 6, 2009, issued in connection with the above-identified application. A request for continued examination (RCE) accompanies this Amendment. Claims 5-8 are pending in the present application. With this Amendment, claims 5 and 6 have been amended. No new matter has been introduced by the amendments made to the claims. Favorable reconsideration is respectfully requested.

In the Office Action, claims 5-8 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Shea (U.S. Patent No. 5,809,061, hereafter "Shea") in view of Spruyt et al. (U.S. Publication No. 2002/0118658, hereafter "Spruyt"). The Applicants have amended independent claim 5 to help further distinguish the present invention from the cited prior art.

Independent claim 5 recites the following features:

“[a] communication system comprising a first apparatus and a second apparatus in which a plurality of frequency signals are communicated between said first apparatus and said second apparatus via a common cable,

said first apparatus comprising:

a multiplexing means for multiplexing a plurality of signals which are different in frequency from each other, and for transmitting at least one multiplexed signal to said second apparatus via the common cable; and

a transmission-sided reference frequency signal level detecting means for detecting electric power of a reference signal among the plurality of signals before multiplexing by said multiplexing means; and

said second apparatus comprising:

a separating means for separating the reference signal from the at least one multiplexed signal which is received from said first apparatus; and

a reception-sided reference frequency signal level detecting means for detecting electric power of the reference signal which is separated by said separating means,

wherein said communication system further comprising:

a first signal level control means for controlling electric power of the reference signal based on a comparison between a result detected by said transmission-sided reference frequency

signal level detecting means and a result detected by said reception-sided reference frequency signal level detecting means;

a memory for storing correspondence relationships between information related to loss amounts of said common cable based on the comparison and correction values to control electric powers of one of more signals other than the reference signal, wherein the correction values depend on each frequency of the one or more signals; and

a second signal level control means for controlling electric powers of one or more signals other than the reference signal using the correction values stored in said memory based on the comparison.” (Emphasis added).

The features emphasized above in independent claim 5 are fully supported by the Applicants’ disclosure (e.g., pg. 9, line 14-pg. 10, line 7; pg. 28, line 21-pg. 31, line 2; pg. 33, line 8-pg. 34, line 10; pg. 37, line 17-pg. 39, line 5; Fig. 2; and Fig. 3).

The present invention (as recited in independent claim 5) is distinguishable from the cited prior art with regard to the use of “a memory” and “a second signal level control means.” The present invention (as recited in independent claim 5) uses correction values depending on each frequency of the one or more signals, which are stored in the memory. Additionally, using the correction values, the second signal level control means achieves more effective control of electric powers of the one or more signals having each frequency.

In the Office Action, the Examiner relies on Shea in view of Spruyt for disclosing or suggesting all the features of independent claim 5. However, the Applicants assert that Shea in view of Spruyt fails to disclose or suggest all the features now recited in independent claim 5, as amended.

Shea discloses controlling amplitude of a pilot tone signal (see col. 4, line 66-col. 5, line 11), but fails to disclose or suggest controlling electric powers of one or more signals other than the reference signal (i.e., pilot tone signal). For example, Shea discloses “the mobile station receiver further comprises a power measurement means for measuring a power level of the direct sequence spread spectrum demodulated pilot tone signal and generating a power control signal that is supplied to the mobile station transmitter to normalize return channel transmit levels.” Moreover, Shea discloses generally wireless communications between a base station and mobile stations.

Therefore, nothing in Shea addresses concerns regarding loss of a common cable depending on frequency signals, let alone controlling electric powers of different frequency signals other than

the reference signal based on information regarding loss of a common cable concerning the reference signal (comparison between transmission level and receiving level). Thus, Shea fails to disclose or suggest "a memory" and "a second signal level control means," as recited in independent claim 5. That is, the present invention (as recited in independent claim 5) uses correction values depending on each frequency of the one or more signals, and more effective controls electric powers of the one or more signals having each frequency.

Moreover, Spruyt fails to overcome the deficiencies noted above in Shea. Spruyt discloses, for example, that "the immunity of the pilot carrier for interferers, such as radio amateur signals, is improved by modulating the pilot carrier with a non-constant signal, for instance a random signal, an alternating signal or even scrambled data elements (DATA), before transmission thereof" (see e.g., abstract and ¶ [0007]); and also that "[t]he pilot carrier may change in frequency whenever the transmitter or receiver concludes that the pilot frequency is laying within a frequency band with too much interference" (see e.g., ¶ [0011]).

Spruyt fails to disclose or suggest "a memory" or "second signal level control means," as recited in independent claim 5. In particular, the present invention (as recited in independent claim 5) uses correction values depending on each frequency of the one or more signals, which results in more effective controlling of electric power of the one or more signals.

Based on the above discussion, independent claim 5 is not anticipated or rendered obvious by Shea and Spruyt (individually or in combination). Likewise, claims 6-8 are not anticipated or rendered obvious by Shea and Spruyt (individually or in combination) at least by virtue of their dependencies (directly or indirectly) from independent claim 5.

In light of the above, the Applicants respectfully submit that all the pending claims are patentable over the prior art of record. The Applicants respectfully request that the Examiner withdraw the rejections presented in the outstanding Office Action, and pass the present application to issue.

The Examiner is invited to contact the undersigned attorney by telephone to resolve any remaining issues.

Respectfully submitted,

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